

This proposal will limit stations in the amateur radio service located in the state of New Mexico and West Texas to 50 watts peak envelope power in the frequency band of 420-450 MHz. Historically, the majority of military use of the 420-450 MHz band has been in the 420-430 MHz segment. Use of this lower 10 MHz segment by the amateur radio service has been next to non-existent. Many stations in the amateur radio service use commercially available transmitters between 50 and 110 watts pep for mobile and fixed use. Such equipment is readily available surplus from public safety agencies that have switched to 800 MHz. These amateur stations utilize frequency modulation on frequencies within a sub-band of 440-450 MHz. The antennas used with these FM transmitters are typically non-directional and have gains less than 6 dBi. These stations serve the public interest by providing communications for search and rescue, forest fire support, and other local emergencies. The additional power levels provide additional service margins for operations in the difficult terrain common in the state of New Mexico. The potential for interference is actually higher for a transmitter output of 50 watts peak envelope power combined with a high gain directional antenna (>10dBi gain). Such is very common with other modes typically used in the 420-440 MHz portion of the band.

I am suggesting that the power restrictions for stations in the amateur radio service in New Mexico and Texas west of 106W be as follows: 420-450 MHz, 50 watts peak envelope power, with no antenna gain restriction (original plan) but with allowance of operation on 440-450 MHz, 110 watts peak envelope power with a restriction of 6dBi antenna gain, inclusive of transmission line loss.

Amateur use of frequencies in the 420-440 MHz portion of the band is generally uncoordinated and itinerant. Amateur operation in the 440-450 MHz sub-band is mostly on coordinated repeater and simplex frequencies. These frequencies are publically listed on the internet and thus military frequency coordinators could block them out of use to avoid interference. This should further support the argument for higher power levels in this portion of the band.

Douglas L. Hanz  
Amateur Radio Station NC5P  
Albuquerque, New Mexico